

results of BLAST

BLASTN 2.2.9 [May-01-2004]

Reference:

Altschul, Stephen F., Thomas L. Madden, Alejandro A. Schäffer, Jinghui Zhang, Zheng Zhang, Webb Miller, and David J. Lipman (1997), "Gapped BLAST and PSI-BLAST: a new generation of protein database search programs", Nucleic Acids Res. 25:3389-3402.

RID: 1094571710-29413-20494402687.BLASTQ4

Query=

(30 letters)

Database: All GenBank+EMBL+DDBJ+PDB sequences (but no EST, STS, GSS, environmental samples or phase 0, 1 or 2 HTGS sequences) 2,584,441 sequences; 11,696,079,666 total letters

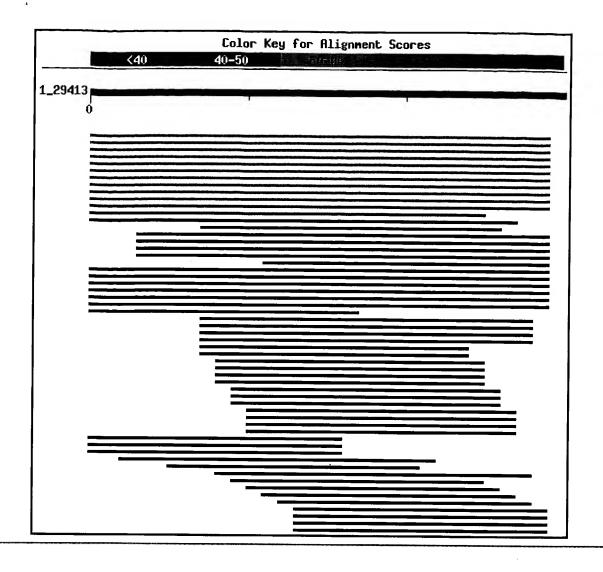
If you have any problems or questions with the results of this search please refer to the ${\tt BLAST\ FAQs}$

Taxonomy reports

Distribution of 68 Blast Hits on the Query Sequence

Mouse-over to show defline and scores. Click to show alignments

 $h \hspace{1.5cm} cb \hspace{1.5cm} h\,g \hspace{1.5cm} b \hspace{1.5cm} cg$



Sequences producing significant alignments:	Score (bits)	E Value	
gi 6226959 ref NM_000014.3 Homo sapiens alpha-2-macroglobu	60		LUG
gi 25303945 gb BC040071.1 Homo sapiens alpha-2-macroglobul	_60	1e-07	LUG
gi 34367784 emb BX648622.1 HSM808773 Homo sapiens mRNA; cDN	_60	1e-07	U
<u>gi 34366357 emb BX647329.1 HSM807473</u> Homo sapiens mRNA; cDN <u>gi 51476395 emb CR749334.1 </u> Homo sapiens mRNA; cDNA DKFZp77	<u>60</u>	1e-07 1e-07	U
gi 46812314 gb AY591530.1 Homo sapiens alpha 2 macroglobul	_60	1e-07	LU
gi 50503702 emb CR622895.1 full-length cDNA clone CS0DE003	60	1e-07	U
<u>qi 50502420 emb CR621613.1 </u> full-length cDNA clone CS0DI030 <u>qi 4726097 qb AC007436.1 </u> Homo sapiens 12 BAC RP11-43619 (R	<u>60</u> 60	1e-07 1e-07	U
gi 177871 gb M36501.1 HUMA2MGL Human alpha-2-macroglobulin	_60	1e-07	LUG
gi 177869 gb M11313.1 HUMA2M Human alpha-2-macroglobulin mR	_60	1e-07	LUG
$ \begin{array}{llllllllllllllllllllllllllllllllllll$	52 48 40	3e-05 4e-04 0.11	
$\begin{array}{lll} \underline{\text{gi} 4506354 \text{ref} \text{NM}} & 002864.1 & \text{Homo sapiens pregnancy-zone pro} \\ \underline{\text{gi} 28436287 \text{gb} \text{AC}139365.3 } & \text{Homo sapiens chromosome 8, clone} \\ \underline{\text{gi} 6139075 \text{gb} \text{AC}010175.4 } & \text{Homo sapiens 12 BAC RP11-118B22 (} \\ \end{array}$	38 38 38	0.42 0.42 0.42	LUG

 $h \hspace{1cm} cb \hspace{1cm} h\,g \hspace{1cm} b \hspace{1cm} cg$

gi 35824 emb X54380.1 HSPZHEP Human mRNA for pregnancy zone	_38	0.42	LUG
gi 190793 gb M24416.1 HUMPZPHuman pregnancy zone protein ggi 33438673 gb AC119848.8 Mus musculus chromosome 7, clonegi 31072075 gb AC101797.5 Mus musculus chromosome 1, clonegi 34419744 gb AC146125.2 Pan troglodytes BAC clone RP43-4gi 31126641 gb AC144532.4 Homo sapiens 12 BAC RP11-613J12	38 36 36 36 36	0.42 1.7 1.7 1.7	
gi 31342256 ref NM 175628.2 Mus musculus alpha-2-macroglob gi 6978424 ref NM 012488.1 Rattus norvegicus alpha-2-macro	<u>36</u>	1.7	
gi 50582665 gb AC150558.1 Drosophila melanogaster clone BA	<u>36</u> <u>36</u>	1.7 1.7	LUG
gi 23958594 gb BC023844.1 Mus musculus alpha-2-macroglobul	<u> 36</u>	1.7	LUG
$\begin{array}{lll} \underline{\text{gi} 49119025 \text{gb} \text{BC}072642.1 } & \text{Mus musculus alpha-2-macroglobul} \\ \underline{\text{gi} 21692610 \text{emb} \text{Z}99758.8 \text{HS}800F24} & \text{Human DNA sequence from c} \\ \underline{\text{gi} 28394386 \text{gb} \text{AC}026131.4 } & \text{Homo sapiens chromosome 11, clon} \\ \end{array}$	36 36 36	1.7 1.7 1.7	LU
gi 27966960 gb AY185125.1 Mus musculus alpha-2-macroglobul	_36	1.7	
gi 7287756 gb AE003415.1 DROSADH09Drosophila melanogaster,gi 30230917 emb BX322613.6 Human DNA sequence from clone Rgi 28446007 emb AL713960.17 Mouse DNA sequence from clone	36 36 36	1.7 1.7 1.7	
gi 14595763 gb AC092398.1 AC092398 Drosophila melanogaster, gi 46358478 gb AC148696.1 Macaca mulatta Major Histocompat	<u>36</u> <u>36</u>	1.7 1.7	
gi 22946597 gb AE003650.2 Drosophila melanogaster chromoso	36	1.7	
gi 24366624 emb AL845156.5 Mouse DNA sequence from clone R gi 21213470 emb AL672143.12 Mouse DNA sequence from clone	<u>36</u> 36	1.7 1.7	
gi 21537461 emb AL645727.16 Mouse DNA sequence from clone	36	1.7	
<u>gi 5001540 gb AC004961.2 AC004961</u> Homo sapiens PAC clone RP <u>gi 40018813 gb AC147052.2 </u> Pan troglodytes BAC clone RP43-1	<u>36</u> 36	1.7 1.7	
gi 202591 gb J02635.1 RATA2M Rat liver alpha-2-macroglobuli gi 34482106 gb AC125396.4 Mus musculus BAC clone RP24-69M4 gi 33342431 gb AC124748.5 Mus musculus BAC clone RP23-261I gi 22748539 gb AC122411.4 Mus musculus BAC clone RP24-143P gi 10047940 gb AC011290.3 Homo sapiens BAC clone RP11-64I2 gi 28209630 gb AC012540.12 Homo sapiens BAC clone RP11-323F gi 28209630 gb AC012540.12 Mus musculus chromosome 7, clon gi 42592648 emb BX530091.6 Zebrafish DNA sequence from clo	36 34 34 34 34 34 34 34 34	1.7 6.5 6.5 6.5 6.5 6.5 6.5	LU
<u>gi 51705424 ref XM_357140.2 </u> PREDICTED: Mus musculus simila <u>gi 10716656 gb AC008177.3 </u> Homo sapiens BAC clone RP11-527A	34	6.5	
gi 49170304 gb AC147992.3 Mus musculus BAC clone RP24-384K	<u>34</u> <u>34</u>	6.5 6.5	
<u>gi 40736936 dbj AP006724.1 </u> Homo sapiens genomic DNA, chrom <u>gi 19033380 gb AC022337.24 </u> Homo sapiens 3 BAC RP11-8703 (R	<u>34</u> 34	6.5 6.5	
gi 17998627 gb AC095040.3 Homo sapiens BAC clone RP11-18M1	34	6.5	
gi 9581603 emb AL163541.13 Human DNA sequence from clone R	34	6.5	
<u>qi 2677628 emb Z82206.1 HS370M22</u> Human DNA sequence from cl <u>qi 4827318 gb AC006034.2 AC006034</u> Homo sapiens BAC clone RP	34	6.5 6.5	LG
gi 6002298 emb AL031768.9 HS136B1 Human DNA sequence from c gi 28268663 emb AL732614.15 Mouse DNA sequence from clone	34	6.5 6.5	
gi 32526885 ref NR_001461.1 Mus musculus KCNQ1 overlapping	34	6.5	
<u>qi 42739980 gb AE017280.1 </u> Bacillus cereus ATCC 10987, sect <u>qi 21261919 emb AL713853.6 </u> Mouse DNA sequence from clone R	<u>34</u> <u>34</u>	6.5 6.5	
gi 11342587 emb AJ271885.2 MMU271885 Mus musculus partial K	34		
gi 15142000 emb AL139374.18 Human DNA sequence from clone	34	6.5	
qi 8777501 dbj AP001295.1 Mus musculus genomic DNA, chromoqi 40353936 gb AC113977.16 Mus musculus chromosome 1, clon	<u>34</u> <u>34</u>	6.5 6.5	L

Alignments

```
>gi|6226959|ref|NM 000014.3| LUG Homo sapiens alpha-2-macroglobulin (A2M), mRNA
        Length = 4577
 Score = 60.0 bits (30), Expect = 1e-07
 Identities = 30/30 (100%)
 Strand = Plus / Plus
Query: 1
         ttcattcccctgaagccaacagtgaaaatg 30
          ++++
Sbjct: 4208 ttcattcccctgaagccaacagtgaaaatg 4237
>gi|25303945|gb|BC040071.1| LUG Homo sapiens alpha-2-macroglobulin, mRNA (cDNA c
         IMAGE:6056126), complete cds
        Length = 4617
 Score = 60.0 bits (30), Expect = 1e-07
 Identities = 30/30 (100%)
 Strand = Plus / Plus
Query: 1
         ttcattcccctgaagccaacagtgaaaatg 30
         Sbjct: 4217 ttcattcccctgaagccaacagtgaaaatg 4246
Length = 4052
Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus
Query: 1
         ttcattcccctgaagccaacagtgaaaatg 30
         411111111111111111111111111111111
Sbjct: 3662 ttcattcccctgaagccaacagtgaaaatg 3691
Length = 2369
Score = 60.0 \text{ bits } (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus
         ttcattcccctgaagccaacagtgaaaatg 30
         Sbjct: 1955 ttcattcccctgaagccaacagtgaaaatg 1984
```

>gi|51476395|emb|CR749334.1| Homo sapiens mRNA; cDNA DKFZp779B086 (from clone DKFZ

```
Length = 4705
```

Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

>gi|46812314|gb|AY591530.1| LU Homo sapiens alpha 2 macroglobulin (A2M) mRNA, com Length = 4596

Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

Sbjct: 4243 ttcattccctgaagccaacagtgaaaatg 4272

Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

Sbjct: 1102 ttcattcccctgaagccaacagtgaaaatg 1131

Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

Sbjct: 1324 ttcattcccctgaagccaacagtgaaaatg 1353

>gi|4726097|gb|AC007436.1| D Homo sapiens 12 BAC RP11-436I9 (Roswell Park Cancer I Library) complete sequence

 $h \hspace{1cm} cb \hspace{1cm} h \hspace{1cm} g \hspace{1cm} b \hspace{1cm} cg$

```
Length \approx 163881
```

Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus

Query: 1 ttcattccctgaagccaacagtgaaaatg 30

Sbjct: 76397 ttcattcccctgaagccaacagtgaaaatg 76426

>gi|177871|gb|M36501.1|HUMA2MGL LUG Human alpha-2-macroglobulin mRNA, 3' end Length = 2041

Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

Sbjct: 1672 ttcattccctgaagccaacagtgaaaatg 1701

>gi|177869|gb|M11313.1|HUMA2M LUG Human alpha-2-macroglobulin mRNA, complete cds Length = 4577

Score = 60.0 bits (30), Expect = 1e-07
Identities = 30/30 (100%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

Sbjct: 4208 ttcattcccctgaagccaacagtgaaaatg 4237

>gi|45708660|gb|BC026246.1| LU Homo sapiens alpha-2-macroglobulin, mRNA (cDNA clocomplete cds Length = 2306

Score = 52.0 bits (26), Expect = 3e-05
Identities = 26/26 (100%)
Strand = Plus / Plus

Query: 1 ttcattccctgaagccaacagtgaa 26

Sbjct: 1906 ttcattcccctgaagccaacagtgaa 1931

>gi|1805591|dbj|D84338.1|GPIAMA Cavia porcellus mRNA for alpha-macroglobulin, comp Length = 4545

h

cb

h g b

cg

```
Score = 48.1 bits (24), Expect = 4e-04
 Identities = 27/28 (96%)
 Strand = Plus / Plus
Query: 1
          ttcattcccctgaagccaacagtgaaaa 28
           Sbjct: 4186 ttcatcccctgaagccaacagtgaaaa 4213
Length = 183639
 Score = 40.1 bits (20), Expect = 0.11
 Identities = 20/20 (100%)
 Strand = Plus / Plus
Query: 8
           ccctgaagccaacagtgaaa 27
           Sbjct: 29658 ccctgaagccaacagtgaaa 29677
>gi|4506354|ref|NM 002864.1| LUG Homo sapiens pregnancy-zone protein (PZP), mRNA
         Length = 4615
 Score = 38.2 bits (19), Expect = 0.42
 Identities = 25/27 (92%)
 Strand = Plus / Plus
Query: 4
          attcccctgaagccaacagtgaaaatg 30
          Sbjct: 4215 attcccctgaaaccaacagtaaaaatg 4241
>gi|28436287|gb|AC139365.3| D Homo sapiens chromosome 8, clone RP11-643N23, comple
        Length = 185549
 Score = 38.2 bits (19), Expect = 0.42
 Identities = 19/19 (100%)
Strand = Plus / Plus
Query: 12
           gaagccaacagtgaaaatg 30
           1111111111111111111
Sbjct: 36000 gaagccaacagtgaaaatg 36018
>gi|6139075|gb|AC010175.4| D Homo sapiens 12 BAC RP11-118B22 (Roswell Park Cancer
          BAC Library) complete sequence
        Length = 127277
Score = 38.2 \text{ bits (19)}, Expect = 0.42
Identities = 25/27 (92%)
```

Strand = Plus / Minus Query: 4 attcccctgaagccaacagtgaaaatg 30 Sbjct: 5465 attcccctgaaaccaacagtaaaaatg 5439 >gi|35824|emb|X54380.1|HSPZHEP LUG Human mRNA for pregnancy zone protein Length = 4615Score = 38.2 bits (19), Expect = 0.42Identities = 25/27 (92%) Strand = Plus / Plus Query: 4 attcccctgaagccaacagtgaaaatg 30 111111111111111111111111111 Sbjct: 4215 attcccctgaaaccaacagtaaaaatg 4241 Human pregnancy zone protein gene, partial cds >gi|190793|gb|M24416.1|HUMPZP Length = 2788Score = 38.2 bits (19), Expect = 0.42Identities = 25/27 (92%) Strand = Plus / Plus Query: 4 attcccctgaagccaacagtgaaaatg 30 11111111111 1111111 1111 Sbjct: 1217 attcccctgaaaccaacagtaaaaatg 1243 Length = 239297Score = 36.2 bits (18), Expect = 1.7Identities = 18/18 (100%) Strand = Plus / Minus Query: 10 ctgaagccaacagtgaaa 27 11111111111111111 Sbjct: 24987 ctgaagccaacagtgaaa 24970 Length = 169292Score = 36.2 bits (18), Expect = 1.7

h cb hg b cg

Identities = 18/18 (100%)
Strand = Plus / Minus

h

cb

hg b

cg

```
Query: 10
            ctgaagccaacagtgaaa 27
            Sbjct: 20284 ctgaagccaacagtgaaa 20267
>gi|34419744|gb|AC146125.2|  Pan troglodytes BAC clone RP43-4K13 from 7, complete
         Length = 172424
 Score = 36.2 bits (18), Expect = 1.7
 Identities = 18/18 (100%)
 Strand = Plus / Plus
Query: 9
            cctgaagccaacagtgaa 26
            11111111111111111
Sbjct: 76254 cctgaagccaacagtgaa 76271
>gi|31126641|gb|AC144532.4| D Homo sapiens 12 BAC RP11-613J12 (Roswell Park Cancer
            Library) complete sequence
         Length = 131101
 Score = 36.2 bits (18), Expect = 1.7
 Identities = 18/18 (100%)
 Strand = Plus / Minus
Query: 11
             tgaagccaacagtgaaaa 28
             Sbjct: 116557 tgaagccaacagtgaaaa 116540
                            LU Mus musculus alpha-2-macroglobulin (A2m), mRNA
>gi|31342256|ref|NM 175628.2|
         Length = 4622
 Score = 36.2 \text{ bits (18)}, Expect = 1.7
 Identities = 27/30 (90%)
 Strand = Plus / Plus
           ttcattcccctgaagccaacagtgaaaatg 30
           Sbjct: 4227 ttcatccccttgaaaccaacagtgaaaatg 4256
>gi|6978424|ref|NM 012488.1| LUG Rattus norvegicus alpha-2-macroglobulin (A2m),
         Length = 4595
Score = 36.2 bits (18), Expect = 1.7
Identities = 27/30 (90%)
Strand = Plus / Plus
Query: 1
           ttcattcccctgaagccaacagtgaaaatg 30
```

```
Sbjct: 4222 ttcatccccttgaaaccaacagtgaaaatg 4251
                         D Drosophila melanogaster clone BACR01N08, complete se
>gi|50582665|gb|AC150558.1|
         Length = 174139
 Score = 36.2 \text{ bits (18)}, Expect = 1.7
 Identities = 21/22 (95%)
 Strand = Plus / Minus
Query: 8
           ccctgaagccaacagtgaaaat 29
           Sbjct: 52725 ccctgaacccaacagtgaaaat 52704
>gi|23958594|gb|BC023844.1| LUG Mus musculus alpha-2-macroglobulin, mRNA (cDNA c
          partial cds
         Length = 3392
 Score = 36.2 \text{ bits (18)}, Expect = 1.7
 Identities = 27/30 (90%)
 Strand = Plus / Plus
Query: 1
          ttcattcccctgaagccaacagtgaaaatg 30
          Sbjct: 2943 ttcatccccttgaaaccaacagtgaaaatg 2972
>gi|49119025|gb|BC072642.1| LU Mus musculus alpha-2-macroglobulin, mRNA (cDNA clo
          IMAGE: 6839761), complete cds
         Length = 4615
 Score = 36.2 bits (18), Expect = 1.7
 Identities = 27/30 (90%)
 Strand = Plus / Plus
Query: 1
          ttcattcccctgaagccaacagtgaaaatg 30
          Sbjct: 4221 ttcatccccttgaaaccaacagtgaaaatg 4250
sequence
        Length = 140788
Score = 36.2 \text{ bits (18)}, Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Minus
```

h cb hg b cg

cctgaagccaacagtgaa 26

Query: 9

```
Sbjct: 79442 cctgaagccaacagtgaa 79425
```

Score = 36.2 bits (18), Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Plus

Query: 11 tgaagccaacagtgaaaa 28

Sbjct: 3885 tgaagccaacagtgaaaa 3902

>gi|27966960|gb|AY185125.1| LU Mus musculus alpha-2-macroglobulin-P (A2mp) mRNA, Length = 4622

Score = 36.2 bits (18), Expect = 1.7
Identities = 27/30 (90%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

Sbjct: 4227 ttcatccccttgaaaccaacagtgaaaatg 4256

>gi|7287756|gb|AE003415.1|DROSADH09 LD Drosophila melanogaster, chromosome 2L, re section 9 of 10 of the complete sequence Length = 299935

Score = 36.2 bits (18), Expect = 1.7
Identities = 21/22 (95%)
Strand = Plus / Minus

Query: 8 ccctgaagccaacagtgaaaat 29

Sbjct: 298336 ccctgaacccaacagtgaaaat 298315

>gi|30230917|emb|BX322613.6| D Human DNA sequence from clone RP11-745D9 on chromos sequence

Length = 191752

Score = 36.2 bits (18), Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Minus

Query: 11 tgaagccaacagtgaaaa 28

h

cb

hg b

cg

```
sequence
         Length = 203449
 Score = 36.2 \text{ bits (18)}, Expect = 1.7
 Identities = 18/18 (100%)
 Strand = Plus / Minus
Query: 11
             tgaagccaacagtgaaaa 28
             111111111111
Sbjct: 158062 tgaagccaacagtgaaaa 158045
>gi|14595763|qb|AC092398.1|AC092398 LD Drosophila melanogaster, chromosome 2L, re
            BACR03G19, complete sequence
         Length = 165839
 Score = 36.2 bits (18), Expect = 1.7
 Identities = 21/22 (95%)
 Strand = Plus / Minus
Query: 8
           ccctgaagccaacagtgaaaat 29
            Sbjct: 52725 ccctgaacccaacagtgaaaat 52704
>gi|46358478|gb|AC148696.1| D Macaca mulatta Major Histocompatibility Complex BAC
            sequence
         Length = 165811
 Score = 36.2 \text{ bits (18)}, Expect = 1.7
 Identities = 18/18 (100%)
 Strand = Plus / Minus
Query: 8
           ccctgaagccaacagtga 25
            111111111111111111111
Sbjct: 38804 ccctgaagccaacagtga 38787
                          L D Drosophila melanogaster chromosome 2L, section 59
>gi|22946597|gb|AE003650.2|
            sequence
         Length = 273414
Score = 36.2 \text{ bits (18)}, Expect = 1.7
 Identities = 21/22 (95%)
Strand = Plus / Minus
Query: 8
            ccctgaagccaacagtgaaaat 29
```

Sbjct: 252919 ccctgaacccaacagtgaaaat 252898

Score = 36.2 bits (18), Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagcca 18

Sbjct: 26101 ttcattcccctgaagcca 26118

Score = 36.2 bits (18), Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Minus

Query: 8 ccctgaagccaacagtga 25

Sbjct: 78510 ccctgaagccaacagtga 78493

Score = 36.2 bits (18), Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Plus

Query: 10 ctgaagccaacagtgaaa 27

Sbjct: 43836 ctgaagccaacagtgaaa 43853

Score = 36.2 bits (18), Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Minus

Query: 9 cctgaagccaacagtgaa 26

```
Sbjct: 38352 cctgaagccaacagtgaa 38335
```

Score = 36.2 bits (18), Expect = 1.7
Identities = 18/18 (100%)
Strand = Plus / Plus

Query: 9 cctgaagccaacagtgaa 26

Sbjct: 116589 cctgaagccaacagtgaa 116606

>gi|202591|gb|J02635.1|RATA2M Lower alpha-2-macroglobulin mRNA, complete c

Length = 4595

Score = 36.2 bits (18), Expect = 1.7
Identities = 27/30 (90%)
Strand = Plus / Plus

Query: 1 ttcattcccctgaagccaacagtgaaaatg 30

Sbjct: 4222 ttcatccccttgaaaccaacagtgaaaatg 4251

Score = 34.2 bits (17), Expect = 6.5
Identities = 17/17 (100%)
Strand = Plus / Minus

Query: 14 agccaacagtgaaaatg 30

Sbjct: 27808 agccaacagtgaaaatg 27792

Score = 34.2 bits (17), Expect = 6.5
Identities = 20/21 (95%)
Strand = Plus / Plus

Query: 3 cattcccctgaagccaacagt 23

Sbjct: 16942 cattcccatgaagccaacagt 16962

```
Mus musculus BAC clone RP24-143P19 from chromosome 1
>qi|22748539|gb|AC122411.4|
        Length = 182658
Score = 34.2 \text{ bits (17), Expect} = 6.5
Identities = 17/17 (100%)
Strand = Plus / Minus
           agccaacagtgaaaatg 30
Query: 14
           111111111111111
Sbjct: 15416 agccaacagtgaaaatg 15400
>gi|10047940|gb|AC011290.3| D Homo sapiens BAC clone RP11-64I2 from 7, complete se
        Length = 117764
 Score = 34.2 \text{ bits } (17), \text{ Expect = } 6.5
 Identities = 17/17 (100%)
 Strand = Plus / Plus
           gaagccaacagtgaaaa 28
Query: 12
           111111111111111
Sbjct: 67979 gaagccaacagtgaaaa 67995
Length = 29752
 Score = 34.2 bits (17), Expect = 6.5
 Identities = 17/17 (100%)
 Strand = Plus / Plus
Query: 1
           ttcattcccctgaagcc 17
            111111111111111
Sbjct: 10302 ttcattcccctgaagcc 10318
Length = 211091
 Score = 34.2 \text{ bits } (17), \text{ Expect = } 6.5
 Identities = 17/17 (100%)
 Strand = Plus / Minus
```

h cb hg b cg

Ouery: 14

agccaacagtgaaaatg 30

Sbjct: 167816 agccaacagtgaaaatg 167800

```
complete sequence
Length = 180025
```

Score = 34.2 bits (17), Expect = 6.5Identities = 17/17 (100%) Strand = Plus / Minus

aagccaacagtgaaaat 29 Query: 13

Sbjct: 113546 aagccaacagtgaaaat 113530

Lambda K 1.37 0.711 1.31

Gapped Н K Lambda

٠٠ د،

1.31 0.711 1.37

Gap Penalties: Existence: 5, Extension: 2

Number of Sequences: 2584441 Number of Hits to DB: 681,709 Number of extensions: 34189

Number of successful extensions: 9654 Number of sequences better than 10.0: 15

Number of HSP's better than 10.0 without gapping: 15

Number of HSP's gapped: 9654

Number of HSP's successfully gapped: 15

Number of extra gapped extensions for HSPs above 10.0: 9629

Length of query: 30

Length of database: 11,696,079,666

Length adjustment: 19

Effective length of query: 11

Effective length of database: 11,646,975,287

Effective search space: 128116728157

Effective search space used: 128116728157

A: 0

X1: 11 (21.8 bits)

X2: 15 (30.0 bits)

X3: 25 (50.0 bits)

S1: 12 (25.0 bits)

S2: 17 (34.2 bits)